DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 22, 2018

TO: S. A. Stokes, Technical Director

FROM: P. Foster and P. Fox, Hanford Resident Inspectors

SUBJECT: Hanford Activity Report for the Week Ending June 22, 2018

105-KW Basin: The work team met the fill completion criteria for the first Sludge Transport and Storage Container (STSC) (see 6/15/2018 report) and have prepared the STSC for transport. They will move the container to T-Plant next week where the STSC will be placed in storage.

Plutonium Finishing Plant: The contractor completed loading the remaining transuranic waste that was previously contained only in soft-sided containers into hard-sided shipping containers for movement to and storage at the Central Waste Complex (see 5/11/2018 report). This work has reduced the material at risk (MAR) within the PFP footprint by 90 percent. Additionally, the expert panel (see 3/19/2018 report) that DOE convened to review plans for resuming demolition work completed their support of the project and the contractor has modified their resumption plan to address the panel's comments. DOE-RL has communicated the resumption plan to the Washington State Department of Ecology and the Environmental Protection Agency to support their determination regarding whether the contractor has completed sufficient actions to remove their stop work order (see 1/19/2018 report).

216-Z-9 Waste Storage Crib: During a review of the facility DSA, the contractor determined that a recent MAR revision had not been incorporated into the consequence calculation for one of the design basis accidents (DBA). They have determined that a PISA exists and are performing a USQ determination. Based on preliminary results, it does not appear that the error will result in any significant changes to the DBA hazard classifications.

Tank Farms: DOE held a public meeting to discuss the draft Waste Incidental to Reprocessing (WIR) evaluation to support the closure of C Tank Farm. The WIR is an initial step in determining if the residual waste in the retrieved tanks in C Farm can be safely reclassified as low-level waste. Once approved, the site will be able to advance on the stabilization and closure of the C Farm tanks. The public comment period on the WIR will close in September 2018.

Building 324: The Radio-chemical Engineering Complex A-cell crane shield door failed in an open position when workers attempted to close the door at the end of a work day. The investigation determined that a cable mechanism that operates the door became loose and entangled on a support piece while being unreeved from its spool. The problem most likely resulted from the door catching on the airlock crane, which was slightly out of position. The door remains open and the contractor is developing a recovery plan. Additionally, the contractor is reviewing crane operation processes, along with potential lighting and camera improvements that might improve visibility, in order to preclude future occurrences.

The contractor completed the investigation of the exposed electrical wires (see 6/15/2018 report). The wires were determined to be electrically isolated. The false positive voltage reading initially seen was likely due to the wires' close proximity to other energized cabling and the use of a proximity voltage tester which indicates the presence of voltage but not a specific voltage level.